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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Oliver Hurst-Hiller

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WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION)

CIRA CENTRE, 12TH FLOOR

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EXAMINER

FERNANDEZ RIVAS, OMAR F

ART UNIT

PAPER NUMBER

2129

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,271	Applicant(s) HURST-HILLER ET AL.	
	Examiner OMAR F. FERNANDEZ RIVAS	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-17 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-17 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to an Amendment filed by the Applicant entered on November 5, 2007.
2. The Office Actions of August 3, 2007, December 1, 2006 and June 2, 2006 are incorporated into this Final Office Action by reference.

Status of Claims

3. Claims 1, 2, 6, 7, 10, 11 and 25 have been amended. Claims 9, 18-24 and 26 have been previously cancelled. Claims 1-8, 10-17 and 25-29 are pending on this application.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Biebesheimer et al. (US Patent Application Publication #2002/0152190, referred to as **Biebesheimer**).

Claims 1, 10 and 25

Biebesheimer anticipates a method for obtaining predicted user satisfaction data (not further defined) regarding the performance of a search mechanism which provides search results in response to user queries (**Biebesheimer**: abstract, L1-26; page 2,

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pars 16-20; page 3, par 30; page 5, pars 42-44; Examiner's Note (EN): paragraph 8 applies. Obtaining a response set based on relevancy to the user's query is obtaining predicted user satisfaction data. Moreover, the indexing function determines the value of the search results (the response set) for a user in their context. Also note the weighting function (user satisfaction) of the Adaptive Indexing), comprising: storing at least one predictive pattern model for predicting user satisfaction with said provided search results from data regarding user behavior in response to a query

(Biebesheimer: abstract, L17-26; page 2, pars 16-19; page 3, par 32, L7-26; pages 5 and 6 pars 41-50; Fig. 1; EN: storing user interactions (predictive patterns) to select a response set that is most relevant to the user's query (predicting user satisfaction)) and applying said predictive pattern model to context-based user behavior data comprising user feedback data and context data associated with the user feedback data, the context based user behavior data acquired after receipt by a user of the search results **(Biebesheimer:** page 2, par 19; page 3, pars 30 and 32; page 4, pars 34-35; pages 4 and 5, pars 41-44; page 6, pars 49-50; EN: item 10 applies. The indexing functions uses the user interaction records which include previous interactions of the user (predictive patterns) including context information (context-based user behavior data) and user feedback received from the user after a list of resources has been displayed. Moreover, the resource set is presented to the user based on the degree of fit with the user's most important context variables as indicated by the prior use of the system); and generating predicted user satisfaction data based on the application of the predictive pattern to the context-based user behavior data, the predicted user satisfaction data is

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an indication of satisfaction that a user experiences in evaluating search results, wherein the predicted user satisfaction data is used to monitor the performance of a search mechanism (**Biebesheimer**: abstract, L1-12; page 1, par 2; page 2, pars 18-19; page 3, par 30; pages 4 and 5 pars 41-44; EN: item 10 applies. The resource set is presented to the user based on the degree of fit (user satisfaction data) with the user's most important context variables as indicated by the prior use of the system as well as by context choices of the current query. The adaptive indexing functions will be optimized based on an evaluation metric applied to the user interaction feedback (monitoring the performance of the search mechanism)).

Claims 2 and 11

Biebesheimer anticipates storing at least one predictive pattern model comprises utilizing data mining techniques (not further defined) to determine at least one predictive pattern for user satisfaction (**Biebesheimer**: page 5, par 43-44; EN: supervised learning is a data mining technique).

Claims 3 and 12

Biebesheimer anticipates said context-based user behavior data (not further defined) comprises explicit user feedback data (**Biebesheimer**: pages 4 and 5, par 41; page 6, pars 49-50; page 7, par 64, L1-12; page 8, pars 66-67; EN: obtaining data from the user defining the query is explicit user feedback as defined in page 2, par 17 of the present application).

Claims 4 and 13

Biebesheimer anticipates said context-based user behavior data comprises implicit user feedback data (**Biebesheimer**: page 2, par 19, L6-22; page 5, par 41, L7-25; page 6, par 50; EN: user interactions is user behavior data; the selections made by the user are implicit feedback as defined in page 2, par 17 of the present application).

Claims 5 and 14

Biebesheimer anticipates said context-based user behavior data is selected from the group comprising: user navigation to a new page using a hyperlink; user navigation to a new page using a history list; user navigation to a new page using an address bar; user navigation to a new page using a favorites list; user scrolling behavior; user document printing behavior; user adding a document to said favorites list; user switching focus to a different application; user switching focus back from a different application; user closing a window; user dwell time behavior; user initiation of a new query; sequences of user behaviors; and user inactivity without switching focus from a window relating to said performed query (**Biebesheimer**: page 3, par 30; page 3, par 32; page 5, par 41, L7-17; EN: redefining a query is initiating a new query, user interactions is a sequence of user behavior).

Claims 6 and 15

Biebesheimer anticipates said application of said predictive pattern model yields predicted user satisfaction data regarding said search mechanism (**Biebesheimer**: page 2, par 19; page 4, par 37; the Adaptive Indexing algorithm applies the predictive pattern. Maximizing the number of successful retrievals by improving the resource indexing functions is yielding predicted user satisfaction data regarding the search

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mechanism), and where said method further comprises: displaying said predicted user satisfaction data (**Biebesheimer**: page 6, par 49; page 9, par 73; EN: the ordered response set is predicted user satisfaction data).

Claims 7 and 16

Biebesheimer anticipates said application of said predictive pattern model further comprises isolating a set of said performed queries which are unsatisfactory and which share a common characteristic (**Biebesheimer**: page 3, par 30, L19-28; page 7, par 59-60; page 8, par 70; EN: the exclusionary filters isolate unsatisfactory search queries).

Claims 8 and 17

Biebesheimer anticipates said context-based user behavior data comprises a testing set of context-based user behavior data (**Biebesheimer**: page 3, par 33, L1-14; EN: item 10 applies. The minimal user context vector is a testing set of context based user behavior).

Claim 27

Biebesheimer anticipates isolating problematic queries based on the predicted user satisfaction data (**Biebesheimer**: page 2, par 19, L6-22; page 5, pars 43.and 44).

Claim 28

Biebesheimer anticipates generating a summary of measured satisfaction based on the predicted user satisfaction data (**Biebesheimer**: page 5, par 45, L9-23; EN: generating a response set based on the scoring or relevance (satisfaction data) to the user's query).

Claim 29

Biebesheimer anticipates monitoring a search mechanism responsive to the predicted user satisfaction data (**Biebesheimer**: page 2, par 19; page 4, par 37; page 5, pars 42-44; Fig. 1; EN: item 10 applies. If the system is learning, then some monitoring is taking place).

Response to Applicant's arguments

5. The Applicants arguments have been fully considered but are not persuasive.

In reference to Applicant's arguments on page 9:

Applicant notes that Claim 1 is directed to a method for obtaining predicted user satisfaction data. Also, as recited in Claim 1, the predicted user satisfaction data is used to monitor the performance of a search mechanism. (See Claim 1). Given the claim definition of "predicted user satisfaction", it becomes clear that Claim 1 is directed to a method for obtaining an indication of satisfaction that **a user experiences in evaluating search results**. Beibesheimer discloses no such prediction of the satisfaction that a user experiences **after he evaluates a set of search results**.

Applicant respectfully submits that Biebesheimer, in teaching an adaptive resource indexing and lookup method and system that generates a response set, **fails to teach a system that generates a method for obtaining "an indication of satisfaction that a user experiences in evaluating search results"**. Moreover, the present Office Action **mistakenly equates obtaining the Biebesheimer response set with an indication of satisfaction that a user experiences in evaluating search results (a.k.a. predicted user satisfaction data) as recited in Claim 1**. The present 35 USC § 102(b) anticipation rejection is partially based on this mistaken conclusion. Accordingly, Applicant respectfully submits that Biebesheimer cannot anticipate Claim 1 under 35 USC § 102(b) because Biebesheimer does not teach all elements of Claim 1.

Examiner's response:

The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

The Applicant argues that "given the claim definition of "predicted user satisfaction", it becomes clear that Claim 1 is directed to a method for obtaining an

indication of satisfaction that a user experiences in evaluating search results”.

However, nothing in the claim relates the predicted user satisfaction to the evaluation of the user of the search results or that the prediction of the satisfaction is obtained after the user evaluates a set of the search results. The claim only says that user satisfaction data is generated based upon the application of a predictive pattern model to context-based user behavior data. The pattern model predicts user satisfaction with the search results from data regarding user behavior in response to a query. The context-based user behavior data is obtained after receipt by the user of the search results and comprises feedback data and context data associated with the user feedback data. There is nothing in the claim that suggests that the user evaluates the search results received and that the predictive pattern model uses the evaluation of the search results made by the user in order to generate user satisfaction data to monitor the performance of the search mechanism. User behavior could be anything that the user does after receiving the search results, not necessarily evaluating the search results to determine if they are useful or not.

As for the argument that Biebesheimer fails to teach a system that generates a method for obtaining "an indication of satisfaction that **a user** experiences in evaluating search results", the system described by Biebesheimer generates a response set that includes the most relevant items to a user's query (**Biebesheimer**: abstract, L1-26; page 2, pars 16-20; page 3, par 30; page 5, pars 42-44). Clearly, if the system is providing the items that it predicts are most relevant to a user's query, it is providing an "indication" of the satisfaction that **a user** (any user) would experience in evaluating the

search results obtained (**relevant items** are presented that will probably satisfy the user's query). Also note that the resource indexing functions are adapted based on the history of the user's interactions and feedback with the system. If the system is being adapted, it is also an "indication" of the satisfaction of the user with the results obtained.

Another point worth mentioning is that the user satisfaction data is a prediction generated by the system which is an "indication" of the satisfaction that **a user** experiences upon evaluating the search results. Therefore it is not necessarily based on the evaluations made by the **current user** on the results received, but by what any user or what the system itself believes would be the experience of the user in evaluating the search results.

Examination Considerations

6. Examiner has cited particular columns and line numbers (or paragraphs) in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific imitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. The entire reference is considered to provide disclosure relating to the claimed invention.

7. The claims and only the claims form the metes and bounds of the invention.

"Office personnel are to give the claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 105455, 44USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d, 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-8, c 2, I 45-48; p 2100-9, c 1, I 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable sense. Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an approach is broad in concept and can be either explicit or implicit in meaning.

8. Examiner's Notes are provided with the cited references to prior art to assist the applicant to better understand the nature of the prior art, application of such prior art and, as appropriate, to further indicate other prior art that maybe applied in other office actions. Such comments are entirely consistent with the intent and spirit of compact prosecution. However, and unless otherwise stated, the Examiner's Notes are not prior art but a link to prior art that one of ordinary skill in the art would find inherently appropriate.

9. Unless otherwise annotated, Examiner's statements are to be interpreted in reference to that of one of ordinary skill in the art. Statements made in reference to the condition of the disclosure constitute, on the face of it, the basis and such would be obvious to one of ordinary skill in the art, establishing thereby an inherent prima facie statement.

10. Examiner's Opinion: items 7-9 apply. The claims and only the claims form the metes and bounds of the invention. The Examiner has full latitude to interpret each claim in the broadest reasonable sense.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Claims 1-8, 10-17 and 25-29 are rejected.

Correspondence Information

13. Any inquires concerning this communication or earlier communications from the examiner should be directed to Omar F. Fernández Rivas, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-2589 or email omar.fernandezrivas@uspto.gov.

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If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Omar F. Fernández Rivas
Patent Examiner
Artificial Intelligence Art Unit 2129
United States Department of Commerce
Patent & Trademark Office

/Omar F. Fernández Rivas/
Examiner, Art Unit 2129

Wednesday, April 23, 2008.

/David R Vincent/

Supervisory Patent Examiner, Art Unit 2129